PROJECT DESCRIPTION

GENERAL

This portion of the project involves the modification of three existing Traffic Control Signals with street lighting and interconnect and also the installation of one partial Traffic Control Signal with street lighting and interconnect in Talbot County. The four affected locations are:

US 50 and Idlewild Avenue
US 50 and MD 331 (Dover Road)
US 50 and MD 328 (Matthewstown Road) US 50 and Dutchmans Lane

The partial Traffic Control Signal shall be installed at US 50 and Idlewild Ave.
These modifications are due to resurfacing and minor geometric improvements along US 50.
US 50 is assumed to run in an east—west direction at all four locations. This project also includes payment marking and signing modifications as a result of the addition of a third lane along US 50.

II. INTERSECTION OPERATION

US 50 and Idlewild Avenue

- 1. The intersection is to operate in a NEMA three-phase, fully-actuated mode, with the US 50 eastbound approach running in its own phase. US 50 westbound thru traffic shall not be effected by the signal. An Exclusive left turn phase shall be provided for the westbound approach of US 50. The Idlewood Avenue approach shall run in itsown phase
- 2. A full-traffic-actuated, eight-phase controller with one (1) four channel, rack mount loop detector amplifiers, video interface and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.
- Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787–7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.

US 50 and MD 331 (Dover Road)

- 1. The intersection phasing shall remain unchanged.
- 2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

US 50 and MD 328 (Matthewstown Road)

- 1. The intersection phasing shall remain unchanged.
- 2. Video interface shall be installed into the existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet at this intersection.

US 50 and Dutchmans Lane

- 1. The intersection phasing shall remain unchanged.
- 2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables. excluding interconnect, to the appropriate terminals and shall properly label each cable.
- 2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- 3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- 4. The Contractor shall be responsible for installing the splice kits from the exsting 2 conductor (aluminium shielded) cable to the proposed loop wire at the existing handhole. There will be no charge for this part of the project by the Contractor.
- 5. The Contractor shall install the loop detectors before the final surface is installed.
- 6. Any conduit sleeve that is 6' or less in length shall use the 1" liquid tight non-metallic conduit sleeve. Any conduit greater than 6' shall use the 1" galvanized conduit sleeve.
- 7. All unused cables shall be removed from the existing conduits and it shall be the responsibility of the Contractor to dispose of these unused cables.

The contact persons for District #2 are as follows:

Mr. Robert Kiel Assistant District Engineer - Traffic Phone: (410) 810-3240 Mr. Terry Wright Assistant District Engineer – Maintenance Phone: (410) 810–3250

Mr. Barry Clothier Assistant District Engineer – Utility Phone: (410) 810–3274

Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787-7630 Mr. Ed Rodenhizer Signal Shop 410-787-7652 Mr. Sonny Bailey Sign Shop 410-787-7670 The power company representative is: Bill Vorwald Easton Electrical Co-Op Phone: 410-822-6110

EQUIPMENT LIST

QUANTITY

| Α. | EQUIPMENT | TΩ | RF | SUPPLIED | RY | S.H.A. | |
|----|------------|----|----|----------|-----|--------|--|
| м• | CROTLWEIAI | 10 | DE | SOLLFIED | D I | 3.n.A. | |

DESCRIPTION

| 971017 | EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET- BASE MOUNT | 1 | EA | |
|--------|--|------|----|---|
| 973023 | SHEET ALUMINUM SIGNS | 86.5 | SF | |
| | W3-3 NEW "SIGNAL AHEAD" sign. (36" x 36") ground mounted with hardware. | 2 | EA | |
| | D3-2 "Idlewild Ave" sign. (variable x 16") mast arm (dual faced). | 1 | EA | |
| | D-3(2) "Idlewild Ave" sign. (72" x 12") ground mounted with hardware. | 2 | EA | |
| | OM-1(1) "Object Marker" sign (18" x 18") ground mounted with hardware. | 2 | EA | |
| | R4-7 "KEEP RIGHT (symbolic)" sign. (24" x 30") ground mounted with hardware. | 1 | EA | |
| | R3-3(2) "NO LEFT OR U TURN (symbolic)" sign. (30" X 30") ground mounted with hardware. | 1 | EA | ı |
| | R3-6 "LEFT TURN AND THRU" sign. (30" x 36") mast arm mounted. | 2 | EA | |
| | R5-1 "DO NOT ENTER" sign. (30" x 30") ground mounted with hardware. | 3 | EA | |
| | | | | |

| D+ | EQUIPMENT TO BE FORNISHED AND/OR INSTALLED BY THE CONTRACTOR | |
|-------------|--|----------|
| CAT CODE | DESCRIPTION | QUANTITY |
| 203030 | TEST PIT EXCAVATION | 13 CY |
| 585600 | 5 INCH WHITE PERMANENT PREFORMED PATTERNED REFLECTIVE PAVEMENT MARKINGS | 140 LF |
| 585624 | 24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS | 365 LF |
| 585630 | HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS (THRU/LEFT) | 3 EA |
| 585630 | HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS (LEFT) | 1 EA |
| A00008 | CUT AND REROUTE INTERCONNECT CABLE INTO PROPOSED CONTROLLER | 20 LF |
| A00008 | REMOVE EXISTING OVERHEAD SIGN. | 8 EA |
| 801003 | CONCRETE FOR LIGHT FOUNDATION | 19 CY |
| 801004 | CONCRETE FOR SIGNAL FOUNDATION | 12 CY |
| 801104 | WOOD SIGN SUPPORTS 4 INCH X 4 INCH | 176 LF |
| 801106 | WOOD SIGN SUPPORTS 4 INCH X 6 INCH | 32 LF |
| 801711 | REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS | 151 SF |
| 802501 | NO. 6 AWG STRANDED BARE COPPER GROUND WIRE | 1485 LF |
| 805115 | 3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED | 525 LF |
| 805118 | 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED | 1020 LF |
| 805125 | 2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED | 1191 LF |
| 805135 | 3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED | 260 LF |
| 805140 | 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED | 20 LF |
| 805160 | 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE | 55 LF |

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

| CAT CODE | DESCRIPTION | QU | IANTII |
|-------------|---|-------|--------|
| 807202 | METERED SERVICE PEDESTAL | 5 | EA |
| 808031 | 40 FOOT LIGHT STRUCTURE - 15 FOOT BRACKET ARM | 9 | EA |
| 810601 | NONINVASIVE DETECTOR, 500 FOOT LEAD IN CABLE | 11 | EA |
| 810605 | NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE | 5 | EA |
| 811001 | FURNISH AND INSTALL ELECTRICAL HANDHOLE | 26 | EA |
| 811004 | REMOVE ELECTRICAL MANHOLE | 2 | EA |
| 813014 | INSTALL GROUND MOUNTED SIGN | 62 | SF |
| 813015 | INSTALL OVERHEAD SIGN | 24.5 | SF |
| 813022 | REMOVE EXISTING GROUND MOUNTED SIGNS | 75 | SF |
| 813023 | RELOCATE EXISTING GROUND MOUNTED SIGNS | 14 | SF |
| 816001 | VIDEO DETECTION CAMERA | 6 | EA |
| 816005 | CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER | 6 | EA |
| 816015 | VIDEO INTERFACE EQUIPMENT | 1 | EA |
| 816215 | OPTICOM NO. 721 DETECTOR EYE | 1 | EA. |
| 818010 | 14 FOOT BREAKAWAY PEDESTAL POLE | 1 | EA |
| 818052 | STEEL POLE WITH SINGLE 70 FOOT MAST ARM | 1 | EA |
| 821002 | BREAKAWAY BASE SUPPORT SYSTEM FOR LIGHTING STRUCTURE | 9 | EA |
| 831010 | 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINATRE | 10 | EA |
| 834001 | CONNECTOR KIT - TYPE I | 9 | EA |
| 834002 | CONNECTOR KIT - TYPE II | 9 | EA |
| 837001 | GROUND ROD -3/4 INCH DIAMETER X 10 FOOT LENGTH | 26 | EA |
| 860284 | 12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION | 21 | EA |
| 860288 | FURNISH AND INSTALL 4 CONDUCTOR OPTICON CABLE | 220 | LF |
| 861104 | ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED) | 895 | LF |
| 861107 | ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) | . 205 | LF |
| 861108 | ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) | 755 | LF |
| 861116 | ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) | 1920 | LF |
| 862101 | LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG) | 1670 | LF |
| 862102 | SAW CUT FOR SIGNAL (LOOP DETECTOR) | 525 | LF |
| 866103 | 15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE | 1 | EA |

EQUIPMENT TO BE REMOVED BY THE CONTRACTOR

ANY EQUIPMENT TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPOERTY OF THE CONTRACTOR



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

US 50 AND IDLEWILD AVE
US 50 AND MD 331 (DOVER RD)
US 50 AND MD 328 (MATTHEWSTOWN RD)

EASTON. MARYLAND



| CALE NONE | DATE <u>4/11/2</u> | 500e C0 | NTRACT NO. TA | 4265187 |
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| ESIGNED BY_ | JAMES ALLEN JR | COUNTY_ | TALBOT | |
| RAWN BY | R. C. | LOGMILE | 20005012.0 | 9 |
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